

Washington State Institute for Public Policy Benefit-Cost Results

Group Cognitive Behavioral Therapy (CBT) for depressed children

Benefit-cost estimates updated July 2015. Literature review updated June 2015.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our technical documentation.

Program Description:

Benefit-Cost Summary								
Program benefits		Summary statistics						
Participants	\$2,807	Benefit to cost ratio	(\$8.19)					
Taxpayers	\$1,314	Benefits minus costs	\$5,205					
Other (1)	\$167	Probability of a positive net present value	74 %					
Other (2)	\$350							
Total	\$4,638							
Costs	(\$567)							
Benefits minus cost	\$5,205							

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our technical documentation.

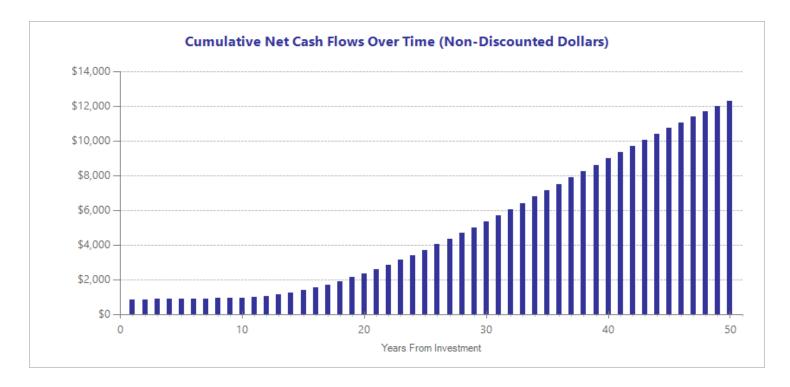
Detailed Monetary Benefit Estimates								
Source of benefits	Participants	Benefits to Participants Taxpayers Other (1) Other (2)						
From primary participant Labor market earnings (anxiety disorder)	\$2,763	\$1,178	\$0	\$0	\$3,941			
Health care (anxiety disorder) Adjustment for deadweight cost of program	\$44 \$0	\$135 \$0	\$167 \$0	\$68 \$283	\$414 \$283			
Totals	\$2,807	\$1,314	\$167	\$350	\$4,638			

We created the two "other" categories to report results that do not fit neatly in the "participant" or "taxpayer" perspectives. In the "Other (1)" category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the "Other (2)" category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates Annual cost Program duration Year dollars Summary statistics Program costs \$293 1 2011 Present value of net program costs (in 2014 dollars) (\$567) Comparison costs \$815 1 2010 Uncertainty (+ or - %) 10 %

The studies in the analysis delivered treatment in 8 group sessions. We estimate treatment cost by multiplying the hourly rate paid by Washington's Regional Service Networks (RSN) for group treatment for non-disabled children, \$36.64. Comparison group costs represent the average payment by the RSNs for children diagnosed with depression.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.



Meta-Analysis of Program Effects											
Outcomes measured	secondary effe	No. of effect sizes	fect N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit- cost analysis First time ES is estimated Second time ES is estimated					
				ES	p-value	ES	SE	Age	ES	SE	Age
Major depressive disorder	Primary	3	37	-0.463	0.047	-0.262	0.233	10	0.000	0.028	11
Anxiety disorder	Primary	1	10	-0.278	0.552	-0.122	0.233	10	-0.056	0.111	11

Citations Used in the Meta-Analysis

Liddle, B. & Spence, S.H. (1990). Cognitive-behaviour therapy with depressed primary school children: A cautionary note. *Behavioural Psychotherapy*, 18(2), 85-102.

Stark, K.D., Reynolds, W.M., & Kaslow, N.J. (1987). A comparison of the relative efficacy of self-control therapy and a behavioral problem-solving therapy for depression in children. *Journal of Abnormal Child Psychology*, 15(1), 91-113.

Weisz, J.R., Thurber, C.A., Sweeney, L., Proffitt, V.D., & LeGagnoux, G.L. (1997). Brief treatment of mild-to-moderate child depression using primary and secondary control enhancement training. *Journal of Consulting and Clinical Psychology*, 65(4), 703-707.

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Printed on 12-05-2015



Washington State Institute for Public Policy

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